### REPORT DOCUMENTATION PAGE

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## CHEMICAL OCEANOGRAPHY

TILTON SCHOOL TILTON, NH AUG 12 - 17, 2001

Steven Emerson, Chair Dave DeMaster, Vice-Chair

Sunday PM

Ocean Chemistry, Dynamics and Climate

Session Chair: Scott Doney, National Center for Atmospheric Research, Bolder, CO

- Nicolas Gruber, University of California, Los Angeles, CA
   "The influence of NAO on the carbon cycle in the North Atlantic Ocean"
- Richard Matear, CSIRO, Hobart, Australia
   "Changes in ocean biogeochemistry caused by protracted global warming"

Monday AM

Rapid Climate Change

Session Chair: Thomas Stocker, University of Bern, Bern, Switzerland

- Richard Alley, Penn State University, University Park, PA "Causes of abrupt climate changes: insights from timing"
- Olivier Marchal, University of Bern, Bern, Switzerland
   "Atmospheric radiocarbon during the Younger Dryas: Production, ventilation, or both"
- Paul Baker, Duke University, Durham, NC
   "Climatic variability of tropical South America at annual to orbital time scales"

Monday PM

Chemical Proxies of Past Climate Change

Session Chair: Adina Paytan, Stanford University, Stanford, CA

- Howard Spero, University of California, Davis, CA
   "Carbon isotopes and the marine record: from enigma to maturity"
- Mark Pagani, Colorado State University, Fort Collins, CO "An examination of the boron isotope proxy"

Tuesday AM

The Nitrogen Cycle

Session Chair: Bess Ward, Princeton University, Princeton, NJ

- Daniel Sigman and Karen Casciotti, Princeton University, Princeton, NJ
   "Coupled measurements of nitrogen and oxygen isotopes in oceanic nitrate: A new tool for the study of the marine nitrogen cycle"
- Bess Ward, Princeton University, Princeton, NJ
   "Functional diversity in microbially mediated nitrogen cycling"
- Stefan Hulth, University of Goteborg, Goteborg, Sweden
   "Nitrogen transformations in marine sedimentary environments alternative pathways of anoxic oxidations"

Tuesday PM

Sediment Geochemistry

Session Chair: Robert Anderson, Lamont-Doherty Earth Observatory, Palisades, NY

• Derek Lovley, University of Massachusetts, Amherst, MA "Novel microbially catalyzed redox reactions in marine sediments"

Philip Froelich. Georgia Institute of Technology "Reverse weathering, authigenic aluminosilicate formation and early silica diagenesis in marine sediments"

Wednesday AM

Gas Hydrates

Session Chair: Erwin Suess, GEOMAR, Kiel, Germany

 Gregor Rehder, Monterey Bay Aquarium Research Institute, Moss Landing, CA "Experimental tests of mechanisms for rapid transfer of methane from the sea floor to the atmosphere"

 Mariam Kastner, Scripps Institution of Oceanography, La Jolla, CA "Environmental implications of methane venting across the sediment-water interface: Results of a one vear in situ experiment at Hydrate Ridge, Cascadia"

 Matthias Haeckel , GEOMAR, Keil, Germany "Gas hydrate dynamics in surface sediments of Hydrate Ridge: Geochemistry, isotopes, biomarker and modeling studies"

#### Wednesday PM

Molecular Organic Chemistry

Session Chair: Tim Eglinton, Woods Hole Oceanographic Institution, Woods Hole MA

 Dan Repeta, Woods Hole Oceanographic Institution, Woods Hole, MA "New concepts on the composition and cycling of dissolved organic matter in seawater"

 Stefan Schouten, Netherlands Institute for Sea Research, den Burg, The Netherlands "Molecular isotope biogeochemistry: applications in determining processes in contemporary and past oceans"

#### Thursday AM

Inorganic Chemistry - Metals

Session Chair: James Moffett, Woods Hole Institution of Oceanography, Woods Hole, MA

• Edward Boyle, Massachussetts Institute of Technology, Cambridge, MA "New insights into iron geochemistry through high resolution automated sampling and ICP-MS analytical methods"

Katherine Barbeau, University of California, Santa Barbara, CA "Photochemical cycling of iron in the surface ocean mediated by iron (III)-siderophore complexes: mechanistic insights from molecular structure"

Ariel Anbar, University of Rochester, NY "Metal isotope fractionation in chemical oceanography: Promise and progress"

#### Thursday PM

Remote Measurements

Session Chair: Ken Johnson, Monterey Bay Aquarium Research Institute, Moss Landing, CA

Charlie Eriksen, University of Washington, Seattle, WA "Gliders: Platforms for biogeochemical measurements"

Ken Smith, Scripps Institute of Oceanography, CA "Benthic Rovers as platforms for biogeochemical measurements"

















# **CHEMICAL OCEANOGRAPHY**

TILTON SCHOOL (12-Aug-01) - (17-Aug-01)

**NOTE**: Receipt of Application does not guarantee acceptance to a Conference. Applications are reviewed by the Conference Chair. If the Chair approves your application, you become **Accepted**, and a registration packet will be mailed immediately. Please allow 3-5 days for your registration to reach you by mail once your name appears. When your registration packet has been received back in our office, you become **Registered**.

Only those who have been Accepted or Registered will have their names listed below. Names of people who have only applied and have yet to be accepted will NOT appear.

Name	Organization	Participation	Status
	UNIVERSITY OF WASHINGTON	Poster Presenter	Registered
JEFFREY T ABELL	MARINE SCIENCES RESEARCH CENTER	Attendee	Registered
ROBERT C ALLER	PENN STATE UNIVERSITY	Speaker	Registered
RICHARD ALLEY	SCRIPPS INSTITUTION OF OCEANOGRAPHY	Attendee	Registered
LIHINI ALUWIHARE		Speaker	Registered
ARIEL D ANBAR	UNIVERSITY OF ROCHESTER	Discussion Leader	Registered
ROBERT F ANDERSON	LAMONT-DOHERTY EARTH OBSERVATORY	Poster Presenter	Registered
PIERRE ANSCHUTZ	UNIVERSITE BORDEAUX 1	Poster Presenter	Registered
DAVID E ARCHER	UNIVERSITY OF CHICAGO	Speaker	Registered
PAUL BAKER	DUKE UNIVERISTY	Speaker Speaker	Registered
KATHY A BARBEAU	SCRIPPS INSTITUTION OF OCEANOGRAPHY		Registered
WILLIAM M BERELSON	UNIVERSITY OF SOUTHERN CALIFORNIA	Poster Presenter	Registered
EDWARD A BOYLE	MASSACHUSETTS INSTITUTE OF TECHNOLOGY	Speaker	Registered
DAVID J BURDIGE	OLD DOMINION UNIVERSITY	Poster Presenter	•
KAREN L CASCIOTTI	PRINCETON UNIVERSITY	Poster Presenter	Registered
CHRISTOPHER D CHARLES	SCRIPPS INSTITUTION OF OCEANOGRAPHY	Attendee	Registered
JOHN P CHRISTENSEN	BIGELOW LABORATORY	Poster Presenter	Registered
THOMAS M CHURCH	COLLEGE OF MARINE STUDIES, UNIVERSITY OF DELAWARE	Poster Presenter	Registered
YESIM COBAN-YILDIZ	MIDDLE EAST TECHNICAL UNIVERSITY	Attendee	Registered
PAULA G COBLE	UNIVERSITY OF SOUTH FLORIDA	Poster Presenter	Registered
PETER L CROOT	NETHERLANDS INSTITUTE FOR SEA RESEARCH	Poster Presenter	Registered
GREGORY A CUTTER	OLD DOMINION UNIVERSITY	Attendee	Registered
DAVID J DEMASTER	NORTH CAROLINA STATE UNIVERSITY	Vice Chair	Registered
SUVASIS DIXIT	GEORGIA INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
SCOTT DONEY	NATIONAL CENTER FOR ATMOSPHERIC RESEARCH	Speaker	Registered
JOHN P DUNNE	UNIVERSITY OF WASHINGTON	Poster Presenter	Registered
MEAGAN J EAGLE	STANFORD UNIVERSITY	Poster Presenter	Registered
TIMOTHY I EGLINTON	WOODS HOLE OCEANOGRAPHIC INSTITUTION	Discussion Leader	Registered
STEVEN EMERSON	UNIVERSITY OF WASHINGTON	Chair	Registered
PIA ENGSTROM	UNIVERSITY OF GOTENBURG	Poster Presenter	Registered
CHARLIE ERIKSEN	UNIVERSITY OF WASHINGTON	Speaker	Registered
KRISTINA L FAUL	STANFORD UNIVERSITY	Poster Presenter	Registered
PHILIP N FROELICH	GEORGIA INSTITUTE OF TECHNOLOGY	Speaker	Registered
BRIAN T GLAZER	UNIVERSITY OF DELAWARE	Poster Presenter	Registered
RALF GOERICKE	SCRIPPS INSTITUTION OF OCEANOGRAPHY	Poster Presenter	Registered
MELCHOR GONZALEZ-DAVILA	UNIVERSIDAD DE LAS PALMAS DE GRAN CANA	Poster Presenter	Registered
	UNIVERSITY OF CALIFORNIA, LOS ANGELES	Speaker	Registered
NICHOLAS GRUBER	CENTER FOR AMS	Poster Presenter	Registered
THOMAS P GUILDERSON	GEOMAR RESEARCH CENTER FOR MARINE GEOSCIENCES	Speaker	Registered
MATTHIAS HAECKEL	UNIVERSITY OF WASHINGTON	Poster Presenter	Registered
ROBERTA C HAMME	THE UNIVERSITY OF SYDNEY	Poster Presenter	Registered
VANESSA HATJE	WOODS HOLE OCEANOGRAPHIC INSTITUTION	Poster Presenter	Registered
KONRAD A HUGHEN		Speaker	Registered
STEFAN HULTH	UNIVERSITY OF GOTEBORG TEXAS A&M UNIVERSITY AT GALVESTON	Poster Presenter	Registered
CHIN-CHANG HUNG	GEORGIA INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
ELLERY D INGALL		Poster Presenter	Registered
ANITRA E INGALLS	SUNY AT STONY BROOK	1 Obler 1 resemble	09.0.0.00

LEONID I IVANOV	MARINE HYDROPHYSICAL INSTITUTE	Poster Presenter	Accepted
KENNETH S JOHNSON	MONTERY BAY AQUARIUM RESEARCH INSTITUTE	Discussion Leader	Registered Registered
LINDA KALNEJAIS	THE CODIDEC INCTITUTION OF OCCANOCRADUV	Attendee Speaker	Registered
MARIAM KASTNER	THE SCRIPPS INSTITUTION OF OCEANOGRAPHY UNIVERSITY OF CHICAGO	Poster Presenter	Registered
CHRISTINE D KLAAS	NETHERLANDS INSTITUTE FOR SEA RESEARCH	Poster Presenter	Registered
ERICA KONING SERGEY K KONOVALOV	MARINE HYDROPHYSICAL INSTITUTE	Poster Presenter	Registered
BOAZ LAZAR	HEBREW UNIVERSITY OF JERUSALEM	Poster Presenter	Accepted
DAVID W LEA	UNIVERSITY OF CALIFORNIA, SANTA BARBARA	Poster Presenter	Registered
KWANG W LEE	HANYANG UNIVERSITY	Attendee	Registered
CINDY LEE	SUNY AT STONY BROOK	Attendee	Registered
AI NING LOH	SMS/VIMS, COLLEGE OF WILLIAM AND MARY	Poster Presenter	Registered
DEREK R LOVLEY	UNIV OF MASSACHUSETTS, AMHERST	Speaker	Registered
GEORGE W LUTHER	UNIVERSITY OF DELAWARE	Poster Presenter	Registered
SHUFEN MA	UNIVERSITY OF DELAWARE	Poster Presenter	Registered
CLAIRE MAHAFFEY	UNIVERSITY OF LIVERPOOL	Poster Presenter	Registered
OLIVIER MARCHAL	UNIVERSITY OF BERN	Discussion Leader	Registered
CHRISTOPHER S MARTENS	UNIVERSITY OF NORTH CAROLINA CHAPEL HILL	Attendee	Registered
PAMELA A MARTIN	UNIVERSITY OF CHICAGO	Attendee	Registered
RICHARD MATEAR	CSIRO	Speaker	Registered
SARAH A MEARON	STANFORD UNIVERSITY	Poster Presenter	Registered
SHANNON L MESECK	OLD DOMINION UNIVERSITY	Poster Presenter	Registered Registered
SIMONE METZ	NATIONAL SCIENCE FOUNDATION	Attendee Poster Presenter	Registered
ELISABETH MICHEL	LSCE, CNRS-CEA	Attendee	Registered
FRANK J MILLERO	UNIVERSITY OF MIAMI PENN STATE UNIVERSITY	Attendee	Registered
ROBERT D MINARD	LEGOS/CNRS	Poster Presenter	Registered
CECILE MIONI	WOODS HOLE OCEANOGRAPHIC INSTITUTION	Discussion Leader	Registered
JAMES W MOFFETT WILLARD S MOORE	UNIVERSITY SOUTH CAROLINA	Poster Presenter	Registered
JENNIFER L MORFORD	WOODS HOLE OCEANOGRAPHIC INSTITUTE	Poster Presenter	Registered
JAMES W MURRAY	UNIVERSITY OF WASHINGTON	Poster Presenter	Registered
BAGHDAD B OUDDANE	UNIVERSITY OF LILLE1	Poster Presenter	Registered
MARK PAGANI	COLORADO STATE UNIVERSITY	Speaker	Registered
SILVIO C PANTOJA	UNIVERSITY OF CONCEPCION	Poster Presenter	Registered
ADINA PAYTAN	STANFORD UNIVERSITY	Discussion Leader	Registered
TSUNG-HUNG PENG	NOAA, ATLANTIC	Attendee	Registered
MICHAEL E Q PILSON	GRADUATE SCHOOL OF OCEANOGRAPHY	Attendee	Registered
BRIAN N POPP	UNIVERSITY OF HAWAII	Poster Presenter	Registered
HOSSAIN H RAHIMPOUR-BONAB	TEHRAN UNIVERSITY	Attendee	Accepted
HARUNUR RASHID	MCGILL UNIVERSITY	Attendee	Registered Registered
GREGOR J REHDER	MBARI	Speaker Poster Presenter	Registered
CLARE E REIMERS	OREGON STATE UNIVERSITY WOODS HOLE OCEANOGRAPHIC INSTITUTION	Speaker	Registered
DANIEL REPETA	MIT	Poster Presenter	Registered
MATTHEW K REUER	NATIONAL SCIENCE FOUNDATION	Speaker	Registered
DONALD L RICE MAK SAITO	PRINCETON UNIVERSITY	Poster Presenter	Registered
	GEORGIA INSTITUTE OF TECHNOLOGY	Poster Presenter	Registered
POULOMI SANNIGRAHI FRANK J SANSONE	UNIVERSITY OF HAWAII	Poster Presenter	Registered
MAGDALENA J SANTANA-CASIANO	UNIVERSIDAD DE LAS PALMAS DE GRAN CANA	Poster Presenter	Registered
PETER SANTSCHI	TEXAS A&M UNIVERSITY	Attendee	Registered
BERND SCHNEIDER	BALTIC SEA RESEARCH INSTITUTE	Poster Presenter	Registered
STEFAN SCHOUTEN	NIOZ (NETHERLANDS INST OF SEA RESEARCH)	Speaker	Registered
DANIEL M SIGMAN	PRINCETON UNIVERSITY	Speaker	Registered
JEAN-PAUL SIMJOUW	OLD DOMINION UNIVERSITY	Poster Presenter	Registered
JAAP SINNINGHE-DAMSTE	NETHERLANDS INSTITUTE VOOR ONDERZOEK DER ZEE	Speaker	Accepted
KEN SMITH	UNIVERSITY OF CALIFORNIA, SAN DIEGO	Speaker	Registered
HOWARD SPERO	UNIVERSITY OF CALIFORNIA, DAVIS	Speaker	Registered
HILMAR A STECHER	OREGON STATE UNIVERSITY	Attendee	Registered
THOMAS STOCKER	UNIVERSITY OF BERN	Discussion Leader	Registered
NIKLAS STROMBERG	ANALYTICAL AND MARINE CHEMISTRY	Poster Presenter	Registered
ERWIN SUESS	GEOMAR	Discussion Leader	Registered
MING-YI SUN	UNIVERSITY OF GEORGIA	Poster Presenter	Accepted Registered
BJORN SUNDBY	McGILL UNIVERSITY	Poster Presenter Poster Presenter	Registered Registered
MARTIAL TAILLEFERT	GEORGIA INSTITUTE OF TECHNOLOGY	Poster Presenter Poster Presenter	Registered
BO THAMDRUP	AMES RESEARCH CENTER	Poster Presenter	Registered
CARRIE J THOMAS	NORTH CAROLINA STATE UNIVERSITY	Poster Presenter	Registered
ROBERT E TROUWBORST	UNIVERSITY OF DELAWARE	Poster Presenter	Registered
PHILIPPE VAN CAPPELLEN	UTRECHT UNIVERSITY NETHERLANDS INSTITUTE FOR SEA RESEARCH (NIOZ)	Poster Presenter	Registered
CLAAR VAN DER ZEE ALEXANDER VAN GEEN	LAMONT-DOHERTY EARTH OBS.	Poster Presenter	Registered

MICHAEL W WARA BESS B WARD JOAN D WILLEY **GISELA WINCKLER ULRICH G WORTMANN** JIA-ZHONG ZHANG

UNIVERSITY OF CALIFORNIA, SANTA CRUZ PRINCETON UNIVERSITY UNIVERSITY OF NORTH CAROLINA AT WILMINGTON LAMONT-DOHERTY EARTH OBSERVATORY ETH-ZURICH CIMAS/RSMAS/UNIVERSITY OF MIAMI

Poster Presenter Registered Discussion Leader Registered Poster Presenter Poster Presenter Poster Presenter Registered Attendee

Registered Registered Registered















